

## ABSTRACT

This invention relates to mutated adenoviral fiber proteins and adenovirus particles containing such proteins. It further relates to polynucleotides encoding the proteins and vectors containing polynucleotides. It also relates to methods for making and using the adenoviral particles. With the mutated fiber proteins, the adenovirus particles no longer bind to their natural cellular receptor. They can then be "retargeted" to a specific cell type through the addition of a ligand to the virus capsid, which causes the virus to bind to and infect such cell. Specific fiber mutations are listed, which ablate binding to the natural receptor. Adenovirus particles with certain fiber mutations were found to enhance gene transfer to and expression in liver as compared to viral particles with wild-type fiber.